CHAPTER 4: BATTLEFIELD AUTOMATION

INTRODUCTION

Automating the battlefield involves planning, oversight and execution of information operations. In today's information age, financial management operations are dependent on electronic information systems. Most financial transactions are executed by electronic data interchange. Timely and accurate financial management information is critical.

INFORMATION OPERATIONS

Information operations encompasses the acquisition, use, protection, exploitation, and management of information and supporting information systems. Information and supporting information systems are categorized as internal to the tactical environment or functionally external to the sustainment base component. This includes support of split-based operations. Today the US operates in a world with a Global Information Environment. Most electronic information systems and information networks are interconnected. Unless systems have intricate firewalls to block outside intruders or are stand-alone systems, hostile forces can access them. Passwords and system protocols are highly valuable pieces of information that, if in the wrong hands, can cause the compromise of entire systems. FM 100-6, Information Operations is the capstone manual for the management of information. Security of financial management information is of high priority. Safeguarding of information is the responsibility of all financial management personnel. Commanders must implement information security to prevent hostile forces from accessing systems via the Internet or other means. Financial management data is subject to virus infection. Commanders must ensure proper measures are in place to protect against this threat.

Unit commanders are responsible for information management within their units. The staff officer responsible for the execution of information operations in the FINCOM, FG, and FB is the S6. Oversight of functional applications is the responsibility of the internal organizational functional proponent (e.g. the disbursing officer for the Disbursing Office Processing System (DOPS) at the FB). All users of information are responsible for the integrity of data processed and the security of the supporting platforms. The S6 has additional functional duties as described in Chapter 5.

DEFENSE FINANCE BATTLEFIELD SYSTEM (DFBS)

GENERAL OVERVIEW

The dynamic nature of Army operations requires financial managers to be aggressive, intelligent and decisive. Accurate and timely information provided to these leaders is key to effective financial management operations. The mission of these leaders is to provide the full spectrum of financial management support to all servicemembers and commanders within their areas of responsibility. This includes support to joint and multinational forces.

Automation and communications are necessary to support operations. Commanders must use technology to capture transactions as close to the source as possible. Financial transactions will take place at all levels of operations. Financial managers must also report these transactions to Congress. Congress likely will require the Army and all other DOD components to report on their stewardship of funds and the execution of programs in support of national objectives. This responsibility begins with finance units and the systems they use.

Finance support must be flexible and responsive. Therefore, finance units use automated data processing systems and advanced communications that are durable, survivable, and portable. Systems are easy to operate, able to use different types of power sources, and able to operate in varying climatic and battlefield conditions. The Army's initiative for a finance battlefield system meets these requirements. However, even with the ideal system, finance units are always prepared to resort to alternative processes in the event of major systems failures or insufficient automation infrastructure.

CAPABILITIES AND CHARACTERISTICS

The Defense Finance Battlefield System (DFBS) is the financial management automated systems platform for deployed operations. It is an integrated standard system using commercial-off-the-shelf (COTS) hardware (and software where applicable). Software modules include support for Disbursing, Military Pay, Vendor Support, Travel, Civilian Pay (under development), non-US Pay, and Resource Management. Software modules are integrated under a network environment, but can also be used in a stand-alone environment detached from the file server. Although the specific systems described in the following paragraphs may change, the capabilities provided to the commander will not. DFBS includes communications hardware to connect to commercial or military communications sources.

Disbursing

The Disbursing Office Processing System (DOPS) provides automated disbursing support. DOPS provides the capability to write Treasury or Local Depository checks plus the daily accountability reconciliation for all transactions. DOPS receives information from the commercial vendor support and travel modules, which will allow the writing of checks for payment of vendors and travel vouchers. DOPS also creates STANFINS (Standard Army Financial System) formatted output for transmission to the Designated Finance Support Activity (DFSA). DOPS creates military pay vouchers and formatted output for upload to DJMS. The EFT interface in DOPS requires an upload to FEDLINE (Federal Reserve Bank software) to place payments in the bank. The successor to DOPS is the STANFINS Redesign Subsystem 1 (SRD 1) Tactical Support System.

Military Pay

The Defense Joint Military Pay System (DJMS) provides military pay support. This software is provided for both Active and Reserve Components, in accordance with DFAS policies and procedures for contingency operations. Software applications for pay change input include JUMPS Data Collection Version 3 (JDC III) for Active Component and the Reserve Component Input System (RCIS). Access to DJMS databases depends on the availability of dedicated communications. If on-line query capability is not available, a batch process DJMS download provides near-time query capability. The Evaluation and Reporting System (EARS) is a stand-alone system capable of providing various reports and files (e.g., LESs, leave) via DJMS batch download.

Vendor Support

The Commercial Accounts Payable System (CAPS) provides vendor support. CAPS is capable of providing support for most commercial vendor payments. Input for contracts can be made within CAPS. Input can also be received electronically from the Standard Army Acquisition and Contract Network System (SAACONS). CAPS will produce vouchers for standard contracts and will maintain the bills register for each contract. CAPS also interfaces with DOPS.

Travel

The Integrated Automated Travel System (IATS) provides automated travel support. IATS provides the capability to process all types of travel payments (except civilian overseas PCS payments, which must be computed manually). IATS creates a file to send to DOPS for payment. IATS also maintains a travel record on every individual receiving a payment. Travel maybe paid, when authorized, via DJMS.

Civilian Pay

The Defense Civilian Pay System (DCPS) provides civilian pay support. This system provides for the input and upload of time and attendance information.

Non-US Pay

The Prisoner of War Information System (PWIS) provides pay support for Enemy Prisoners of War (EPW) and Civilian Internees (CI). This system accounts for the earnings and expenditures of internees in accordance with applicable regulations.

Resource Management

The Databased Commitment Accounting System (dCAS) provides resource management support. This system provides for the input and tracking of all commitment and obligation information; dCAS can receive downloaded STANFINS information to assist in matching commitments with obligations and disbursements. It also has several reports that allow the commander to immediately know current fund status.

EXTERNAL SYSTEM INTERFACES

Systems must interface to provide financial managers at all levels the most current financial management information. DFBS interfaces with other systems to provide optimum support to servicemembers and commanders. The DFBS/STANFINS interface is critical, since STANFINS processes most finance and accounting data transmitted from the AO. The CAPS/SAACONS interface enhances the process of contract payment by providing an electronic means of receiving contracts at finance units.

The projected interface between DFBS and the Combat Service Support Control System (CSSCS) will pass financial management information from DFBS to CSSCS. Commanders will have instantaneous access to the most up to date financial management information.

COMMUNICATIONS

A finance unit's ability to support depends on its ability to communicate. Finance units are dispersed throughout the area of operations. Considering the typically large AOs and the need to coordinate with supported units and higher headquarters, all finance units have communication requirements. They must know what assets are available to provide this support.

To provide effective support, finance units must know their designated AOs. They must know their supported units' locations, strengths, projected currency requirements, and other support requirements. Although finance units use wire communications, they also need mobile and secure communications modes. These modes must be able to range from brigade support to the corps support areas.

The enemy will employ any and all means available to disrupt the ability to communicate. All personnel must be practice good communications security techniques. Financial managers must be careful never to discuss unit strengths, locations, or other sensitive information in an unsecure mode.

COMMUNICATIONS ARCHITECTURE

Finance units use voice and automated data information that require communications means and modes. These means and modes are discussed in Appendix E. Organic communications equipment supports internal fixed site, mobile base station, and mobile unit communications. The S6 coordinates external communications requirements through the supporting signal organization. The signal organization provides commercial or military communications assets as available and appropriate to the requirement. An International Maritime Satellite (INMARSAT) organic to each FINCOM or FG is available for use when military or other commercial means cannot support the immediacy of a voice or data requirement. INMARSAT capability is available to lower echelon finance units as well, depending on METT-T.

Internal Fixed Site Communications

Various communications means are available to support fixed site operations at the Tactical Operations Centers (TOC) of finance units. Most communication requirements will be met by using Mobile Subscriber Equipment (MSE). MSE connects units to digital telephone or combat net radio. Voice means equipment includes the Digital Non-Secure Voice Telephone (DNVT) or a Mobile Subscriber Radio Terminal (MSRT). Facsimile terminals (FAX) support hard copy message capability. This equipment can be set up within either permanent or temporary shelters. This equipment provides commanders the multiple means of communications with outlying units. Headquarters elements at all levels send and receive data from Finance Support Teams (FSTs). Headquarters also receive position reporting information on those teams. The Enhanced Position Location Reporting System (EPLRS) provides this support for finance battalions (FB) and finance detachments (FD). Data will be received at the FG and FINCOM levels via the Tactical Local Area Network (TACLAN).

Base and Remote Support Operations

Finance units have the responsibility to provide support anywhere in the AO via mobile FSTs. This requires a mobile capability and a means to locate and communicate with the FSTs. FSTs transmit information via voice and data means. Communications modes necessary to support this mission includes the MSRT or SINCGARS for voice, and the Enhanced Position Location Reporting System (EPLRS) for data and position reporting.

Tactical Operations Interface

Corps level headquarters have a TACLAN to pass command and control information across the AO. TACLAN node server connectivity will occur for finance units at the FG or FINCOM level. The appropriate S6 is responsible for coordinating this connectivity and for the maintenance of the node server when required. The FB S6 is responsible for the connectivity of the FB and FDs. Transfer of data from dispersed finance units to their next higher level will occur via the TACLAN where capabilities permit.

External Communications

Transmission of information to the sustainment base component is a necessity to support split- based operations. Accountability information is transmitted to DFAS and the ASA(FM&C) to provide immediate operational costing information. The signal architecture within the AO will dictate the most efficient means to transmit this information. Most military means to provide this connectivity are located at corps level units. Figure 4-1 outlines key events and the environment in which they occur, the echelons of capability, and the means of transmitting or receiving information.

ECHELONS OF CAPABILITY
by Environment

KEY EVENT/ ENVIRONMENT	MATURE THEATER	MILITARY COMMO ESTABLISHED	BRING OWN COMMO	NO ELECTRIC COMMO AVAILABLE
Communication from AO to CONUS	Commercial Satellite	Military Non-Secure Satellite	INMARSAT	Disk or paper by air courier
Communications on the Battlefield	Commercial INTERNET and/or LAN	SEN to SEN and/or TACLAN	INMARSAT	Disk or paper by air courier
Update MMPA	Same as peacetime	Same as peacetime except locations limited to commo sites	Same as peacetime except locations limited to commo sites	Send update disk by air courier to DNO
Inquiries to MMPA	Same as peacetime	Inquiries limited to commo sites, the data transferred by SEN	Inquiries limited to commo sites, the data transferred by SEN	MMPA download via EARS air couriered to AO
Update Accounting Data	DOPS, CAPS, DCAS data sent electronically to SRD1/STANFINS at DNO	DOPS, CAPS, DCAS data sent electronically to SRD1/STANFINS at DNO	DOPS, CAPS, DCAS data sent electronically to SRD1/STANFINS at DNO	DOPS, CAPS, DCAS data sent electronically to SRD1/STANFINS at DNO

Figure 4-1

Note that the use of INMARSAT is restricted by ODCSOPS for supporting humanitarian, peacekeeping, disaster relief, and other operations short of war. It cannot be substituted for standard Army equipment during wartime.

One mode of communication at signal units supporting the FG is the Network Encryption System (NES). This will allow the FG to attach unclassified systems into the MSE network and transmit unclassified data across or out of the AO.

Automation Architecture

The architecture for specific automation systems is defined in the technical manuals supporting those systems as well as local policy for the TACLAN. DFBS system specifications and communications requirements are addressed in its technical manual. Data transfer will occur using the best, most secure means possible.

COMMUNICATIONS SECURITY

Communications security (COMSEC) measures deny unauthorized personnel information. Personnel engaged in preparing and transmitting messages, whether by telephone, radio, or messenger, must know and comply with all COMSEC procedures. COMSEC measures include physical, cryptographic, and transmission security. These procedures are in AR 380-19.

SIGNAL OPERATING INSTRUCTIONS (S0I)

The corps signal officer provides necessary SOIs to the finance group S2/S3, who provides necessary SOI extracts to the finance battalion commanders. These extracts include information on major supported units in the FB's area of responsibility. The FINCOM receives SOIs from the ASCC communications command.

COMMUNICATION NETS

A communication net is an organization of stations capable of directly communicating with other users on a common frequency or channel. Finance units communicate with each other primarily on the finance operations net. Finance units may enter supported units' nets such as those listed below.

Command Net

This net is used for tactical control by the commander. Orders, coordination, and information of immediate value are types of messages commonly passed over this net.

Operations And Intelligence Net

FINCOM, FG, and FB S2/3s use this net for command and control purposes. This net is used to control operations and pass intelligence information within commands. The net control station is located at higher headquarters. Finance support teams use this net when deployed from the parent FB or FD. Unit S6s disseminate specific procedures for use of this net.

Administrative Net

This net is used for personnel matters and supply information and requirements. S1s, S4s, and S6s at all levels of command use this net.

Rear Operations Net

This net is used to communicate with the rear tactical operations center (RTOC). The net provides a means of sending out tactical information through the base cluster chain and supporting perimeter defensive actions. The RTOC commander determines use of communications assets.

INTERNAL COMMUNICATIONS

Finance units set up internal wire telephone circuits for perimeter security and for daily coordination. The internal circuits are linked to a unit or base cluster switchboard. This switchboard could have trunks or links to other equipment allowing each subscriber to place and receive calls from a larger network.

EXTERNAL COMMUNICATIONS

Communications with external units go through the area nodal system. Finance units will link into this system either through radio or wire. The circuit can be voice (cellular or line), electronic data, or facsimile. The area nodal system interconnects ASCC area communication systems. Area nodes provide subscriber links to any other subscriber.

Wire circuits are the primary means of external communications for finance units. Finance units are dispersed throughout the AO. Another important factor is the availability of area nodes permitting telephone communications throughout the AO. Organic high-frequency (HF) radio assets support mobile communication requirements.